De Dietrich
PROCESS SYSTEMS

AFII GASKET PORTFOLIO

De Dietrich

Product Description

De Dietrich Process Systems type AFII gaskets are available in all configurations and sizes to fully equip your new or existing glass-lined steel process equipment, meeting industry standards for all process applications. Our range of AFII gaskets includes:

- Single Envelope Gaskets
- Extreme Service Single Envelope Gaskets
- Double Envelope Gaskets
- Extreme Service Double Envelope Gaskets
- U-Cut Gaskets
- Spacer Gaskets

AFII Gasket Features

All gasket envelopes are constructed with high performance, virgin PTFE. The insert rings are made of a highly compressible, liquid-resistant material. These gaskets are absolutely asbestos-free. The corrugated metal ring is made of stainless steel, for long life in most services – a special benefit in corrosive atmospheres. Alternative materials of construction are available, such as monel and hastelloy. Also available are gaskets with grounding tabs for antistatic use, and retaining clips to assist in retaining gaskets on manways and handholes.

All sizes are tested according to ASTM D3308 to ensure pinhole-free operations. All DDPS AFII gaskets meet ASTM standards:

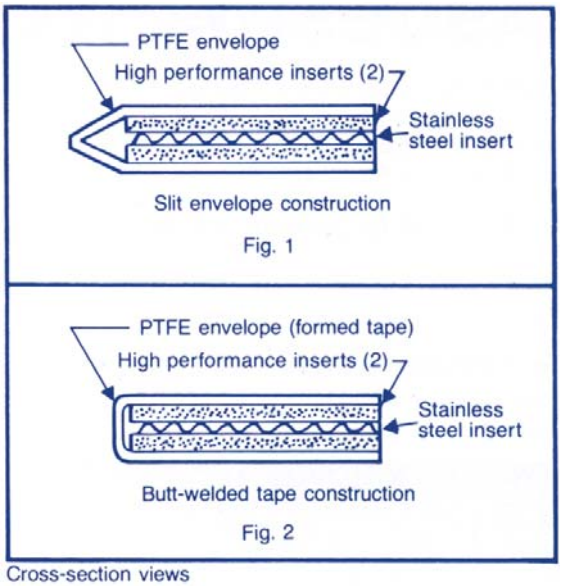
- F112 Standard Test Method for Sealability of Envelope Gaskets
- F336 Practice for Design and Construction of Non-Metallic Envelope Gaskets for Corrosive Service
- F363 Test Method for Corrosion Testing of Gaskets
- F434 Blowout Testing of Pre-formed Gaskets.

Popular sizes and styles are stocked in Corpus Christi, Texas for fast shipment for your new-equipment orders or replacement applications. Our gaskets are generally interchangeable with competitive equipment.

Special Applications

Also available are extra thick envelopes, both single and double, for services that may permeate standard gaskets. DDPS' type AFII has been performance-proved in most applications. Gaskets can also be provided with tabs or ears which can be bent to retain the gasket on the flange of the vessel or the cover. Custom dimensions are also available.

Technical Data	
Operating Temperature	-20°F to 350°F continuous Outside of temperature range please consult with De Dietrich Process Systems
Operating Pressure	1" – 10" Full Vacuum to 750 psig 12" – 36" Full Vacuum to 500 psig > 36" Full Vacuum to 300 psig
pH Range	1-14

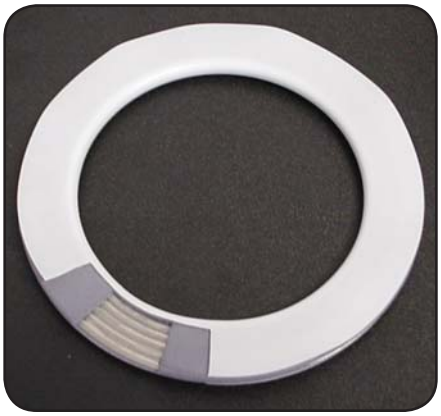


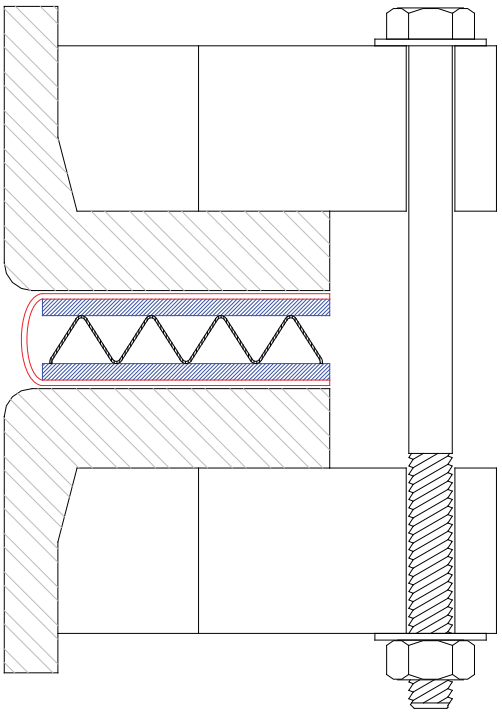
Envelope-type construction of the De Dietrich Type AFII gasket - The PTFE envelope is the slit type (Fig. 1) for small sizes. For larger sizes, the PTFE envelope is constructed of formed tape (Fig. 2), with a smooth, butt-welded junction (especially important for high-vacuum service).

AFII U-CUT GASKET

Product Description

The DDPS AFII U-Cut, a multi purpose U-channel gasket, is an exceptionally high quality gasket for normal service applications on all glass-lined and alloy process equipment where PTFE is compatible with the product and process operating conditions.





Drawing not to scale

AFII U-Cut Applications

Dimensions of the AFII U-Cut combined with the unique DDPS convex U-geometry makes it highly attractive for food and pharmaceutical applications where product build-up is not acceptable and CIP is required.

AFII U-Cut Features

This U-Channel gasket design is vastly superior to all conventional gasket designs using slit or channel (milled) envelopes, including the "bullnose" envelope constructions. Standard features include:

- U-Channel PTFE envelope design with its convex geometry allows the gasket to conform more uniformly to the compressive forces when the nozzle bolts are torqued.
- Consistent thickness of the envelope throughout the leaf & web eliminates the potential for stress cracking inherit in conventional designs, which maintains the integrity of the gasket assembly through the full operating range of temperatures and pressures.
- The liquid resistance feature of "LR 2001 Blue" compressible insert material helps to enhance gasket performance and prolong service life. Wash down a vessel without concern that the gasket will absorb water!

Options

For severe and extreme service conditions, like elevated temperatures and/or pressure fluctuations, the best choice is the U-Cut design with flexible graphite inserts and twice the standard envelope thickness. These features guarantee a top corrosion and permeability barrier.

Nominal Size	I.D.	O.D.	Part Number
1"	1.375	2.625	000133
1 - 1/2"	2.00	3.375	000134
2"	2.625	4.125	000124
3"	3.750	5.375	000135
4"	4	6.875	000125
5"	5.500	7.500	000136
6"	7.000	8.750	000126
8"	9.000	11.000	000127
10"	11.000	13.375	000128
12"	13.000	15.000	000129
18"	19.000	21.000	000130
20"	20.750	23.500	100108
24"	25.000	27.000	000131
12" x 16" with tabs	12x16	15x19	100183
14" x 18" with tabs	14x18	17x21	000166
30 3/4" x 33 1/2"	31x33 1/2	33 1/2	101176

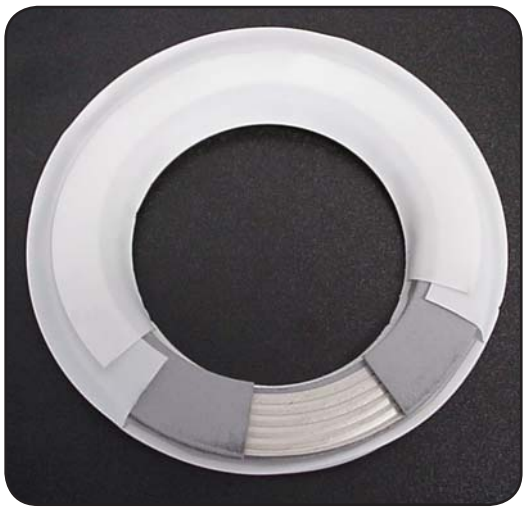
AFII
SINGLE AND DOUBLE ENVELOPE GASKETS

Single Envelope Gasket

The DDPS AFII single envelope gasket is an economical, high quality gasket for all your new or existing glass-lined steel process equipment when the product being handled and the process operating conditions are compatible with PTFE. A virgin PTFE slit envelope is used for small sizes and for the larger sizes, the virgin PTFE envelope is constructed of formed tape with a smooth, butt-welded junction (especially important for high-vacuum service).

Double Envelope Gasket

The DDPS AFII double envelope gasket is the recommended gasket when 100% protection of outside of the gasket is required. This gasket is for all your new or existing glass-lined steel process equipment when the product being handled and the process operating conditions are compatible with PTFE. The inner envelope protects the process side while the outer envelope protects from any atmospheric contaminants. A virgin PTFE slit type or butt-welded type envelopes are used to fully encapsulate the gasket from both the process side and the atmospheric side.



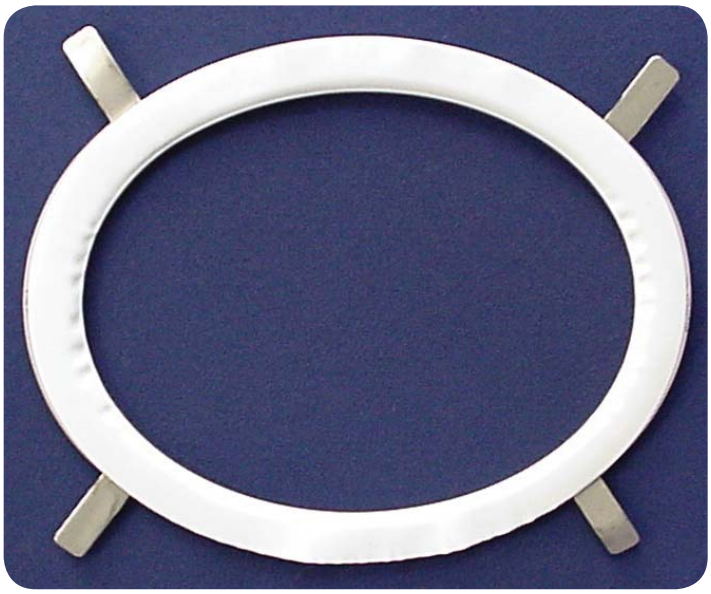
Nominal Size	OD	Article Number*
1”	2 - 1/2”	4501
1 - 1/2”	3 - 3/8”	4502
2”	4”	4504
3”	5 - 3/8”	4505
4”	6 - 1/2”	4507
5”	7 - 1/2”	4508
6”	8 - 1/2”	4510
8”	10 - 1/2”	4512
10”	13”	4514
12”	15”	4516
14”	16 - 1/4”	4517
16”	18 - 1/2”	4518
19 - 1/2”	22 - 1/4”	4520
20”	23 - 1/2”	4521
22 - 7/8”	25 - 3/4”	4522
24”	27”	4523
30”	33”	4526
31”	34 - 1/2”	4528
32”	35”	4529
36”	39 - 1/2”	4531
40”	44”	4533
42”	45”	4534
47”	50”	4536
48 - 3/4”	52 - 3/8”	4538
54”	57”	4539
60 - 1/2”	64 - 3/8”	4541
66”	70”	4542
84 - 3/4”	88 - 3/4”	4543

**When referencing Double Envelope gaskets include “DE” at the end of the article number*

AFII
MANWAY, HANDHOLE & SIGHTGLASS ENVELOPE GASKETS

AFII Manway & Handhole Envelope Gaskets

In addition to our standard gaskets DDPS offers a complete line of gaskets to meet the dimensions of your manway or handhole. These gaskets are for all your new or existing glass-lined steel process equipment when the product being handled and the process operating conditions are compatible with PTFE. A virgin PTFE slit envelope is used for small sizes and for the larger sizes, the virgin PTFE envelope is constructed of formed tape with a smooth, butt-welded junction especially important for high-vacuum service).



Single Envelope		
Nominal Size	OD	Article Number
9” with tabs	11-1/2”	4513-T
24” with tabs	27”	4523-T
9” x 12” with tabs	12” x 15”	4544-T
12” x 16” with tabs	15” x 19”	4545-T
14” x 18” with tabs	17” x 21”	4546-T
18” with tabs	18” x 21”	4519-T

Double Envelope		
Nominal Size	OD	Article Number
9”	11-1/2”	4513-DE
24”	27”	4523-DE
9” x 12”	12” x 15”	4544-DE
12” x 16”	15” x 19”	4545-DE
14” x 18”	17” x 21”	4546-DE

U-Cut Envelope		
Nominal Size	OD	Article Number
24”	27”	000131
12” x 16”	15” x 19”	100183
14” x 18”	17” x 21”	000166
18” with tab	18” x 21”	100947

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